

Flooding in non-coastal areas is increasing in frequency and intensity. Even if you're inland, severe flooding can reach your community and threaten the life you've built. Learn more about your increasing flood risk and flood insurance from National Flood Insurance Program (NFIP).





Myth Versus Fact

According to the National Oceanic and Atmospheric Association (NOAA), from 1901 to 2021, precipitation totals increased 20% to 30% throughout much of the Midwest and Northeast. These heavier precipitation patterns have caused unprecedented extreme flash flooding and flood damage.

Review the following myths and facts about flood insurance to further understand your potential flood risk.



FACT



"Severe flooding only happens in coastal regions."

With storm intensity and frequency increasing, coastal storms now maintain their strength as they travel inland and cause severe flooding. Additionally, flooding can occur in inland communities due to different weather events—like heavy downpours, severe rain or snowmelt after an eventful winter.

"Only property owners in high-risk flood zones need to insure their properties with flood insurance."

Properties in low-risk flood zones are still at risk of flooding. In fact, more than 40% of NFIP flood insurance claims come from outside high-risk flood areas. Recent construction, wildfires, impervious surfaces (e.g., cement), a breached dam, poor stormwater infrastructure and oversaturated land can worsen flooding in any area.

"If my property suffers flood damage, I can apply for and receive federal disaster assistance." Federal disaster assistance is only made available following a presidentially declared disaster and is not a substitute for flood insurance. It is only intended to meet a survivor's basic needs and often comes in the form of a loan from the U.S. Small Business Administration (SBA) that must be repaid with interest.

In comparison, flood insurance claims may be filed regardless of a presidential disaster declaration and provide the means to repair and restore your property after a flood.

Common Inland Flooding Risks

Flash Flooding



Prolonged rainfall or heavy, excessive rain in a short period can cause flash flooding in any region. Flash flooding can last minutes or hours and may occur with little to no warning. Urban areas are more prone to flash flooding than rural areas due to a higher volume of impermeable surfaces (such as cement or blacktop) that increase runoff.



Riverine Flooding

Riverine flooding occurs when streams and rivers exceed their capacity to accommodate water flow, causing the water to overflow the riverbanks and spill into adjacent land. This type of flooding can happen quickly and last for days, weeks or longer depending on the severity and elevation of surrounding floodplains.

Spring Flooding and Snowmelt



Communities in the northern half of the United States may experience spring flooding, brought on by snowmelt and rain-on-snow events. When snow melts, the water soaks into the ground or runs off due to frozen ground or overly saturated land. Runoff can also occur when rain falls on non-absorbent soil. Spring flooding is expected to become a more frequent flood event with temperatures expected to rise throughout the 21st century.



Dam or Levee Failure

Dam or levee failure can occur with little to no warning, potentially causing major flooding in the surrounding areas. Failure of a dam or levee can be brought on by severe storms, like heavy rain and wind events. Flooding caused by dam or levee failure can range from minor to extensive and last for days to weeks.

Learn more about the National Dam Safety Program managed by FEMA at <u>fema.gov/dam-safety</u> and review FEMA's tips on living with levees at fema.gov/flood-maps/living-levees.

Historical Inland Flooding Events

According to NOAA's National Centers for Environmental Information (NCEI), the U.S. has experienced an increase in billion-dollar inland flood events in recent years. In 2019 alone, the Midwest and Southern U.S. were impacted by flood events that left damage totaling at least \$20 billion.

Refer to the following map to review historical flood events that have affected even the most inland communities.

SNOWMELT/SPRING FLOODING

• Snowmelt, rainfall, saturated soil and rising river levels caused flooding and landslides.

- Flooding along the Boise River's banks damaged bridges and homes.
- 200+ NFIP claims were filed from January-June, with an average payment of \$19,353.

ATMOSPHERIC RIVERS

WY, 2021

- An atmospheric river dumped over 9 inches of rain over 24 hours and caused snowmelt.
- Destroyed several entrances to Yellowstone National Park.
- Infrastructure repair and recovery will take years.

ATMOSPHERIC RIVERS

CA, 2022-2023

- Nine atmospheric rivers dumped more than 32 trillion gallons of water across the state, causing severe flooding.
- 700+ landslides were triggered due to rainfall.
- 1,396 NFIP claims were filed with an average payment of \$24,772.

TROPICAL STORM OCTAVE

AZ, 1983

- Tucson received \$370 million in flood damage, including building losses due to flood-related erosion.
- Water volumes on the Santa Cruz River were double those recorded in over 65 years.
- 300+ NFIP claims were filed with an average payment of \$17,913.

RIVERINE FLOODING

payment of \$19,972.

• The Mississippi River rose 7 feet above flood stage,

A total of 1.393 NFIP claims were filed with an average

SNOWMELT/SPRING FLOODING MO, 2011

forcing 5,000 people from their homes.

• The entire state was declared a disaster area.

IA, 1993



HURRICANE IDA

Northeast, 2021



TROPICAL STORM IRENE

and 1,200 bridges were damaged.

VT. 2011

- New York City recorded its wettest hour on record, receiving 3.15 inches of rain.
- The severe rainfall caused \$16 to \$24 billion in flood damage.
- 10,000+ NFIP claims were filed with an average

payment of \$54,108.

FLOODING

KY, 2022

FLOODING

of \$34.518.

WV, 2016

• 8–10 inches of rain over 12 hours caused \$1.1 billion in damage.

3,500 homes, 600 cultural sites, 500 miles of roadway

High winds and flooding caused \$700 million in damage.

5,000+ NFIP claims were filed with an average payment

- 12 county disaster area had thousands of damaged or destroyed homes.
- 1,000 NFIP claims were filed with an average payment of \$53,473

FLOODING

MD, 2016 & 2018

- In both severe rainfall events, approximately 7 inches of rain fell over 3 hours.
- In 2016, the Patapsco River rose a total of 14 feet in 1.5 hours, with reports of 6-8 feet of water.
- · Regional damage totaled approximately \$20 million

RIVERINE FLOODING

Ohio River, 2018

- Southern Ohio and Northern Kentucky received 7-10 inches of rainfall over five days.
- The Ohio River reached its highest level since 1997, rising 8.5 feet above flood stage.
- The heavy rainfall and riverine flooding caused an estimated \$44 million in damage.

Dallas saw 8–16 inches of rainfall over a 24-hour

- Damage to more than 100 homes cost \$6 billion.
- 166 NFIP claims were filed with an average payment of \$54,778.

Orlando endured its wettest September on record (22.21 inches of rain).

- Moderate-to-major river flooding occurred along the Saint Johns River, Little Wekiva River and Shingle Creek
- 1,942 NFIP claims were filed with an average payment of \$59,400.

FLOODING

TN, 2021

- 10-15 inches of rain fell over 12 hours and damaged or destroyed 500 homes.
- NFIP claim payments totaled \$15.9 million.
- FEMA and the Small Business Administration (SBA) provided \$9.3 million in disaster assistance.





ADDITIONAL RESOURCES & CONTACT INFORMATION

The NFIP offers flood insurance policies to property owners, condo associations and renters. For more information on what flood insurance covers, visit floodsmart.gov/whats-covered. To purchase a flood insurance policy, contact your insurance agent or visit floodsmart.gov/find to find a flood insurance provider.

To learn more about other flooding types and how they could affect your area, download the NFIP Flooding & Related Weather Events brochure at agents.floodsmart.gov/nfip-flooding-weather-events.

For more information on the NFIP, visit <u>floodsmart.gov</u> or contact the NFIP at **877-336-2627**.





Congress created the National Flood Insurance Program (NFIP) in 1968 to reduce future flood damage through floodplain management, and to provide people with flood insurance through individual agents and insurance companies. FEMA manages the NFIP.

If you use a relay service, such as video relay service (VRS), casptioned telephone service or others, give FEMA the number for that service.